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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,919	04/21/2006	David A. Blaker	026032-4897	9737

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FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER	
SYED, NABIL H	

ART UNIT	PAPER NUMBER
2612	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,919	BLAKER, DAVID A.	
	Examiner	Art Unit	
	/NABIL H. SYED/	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-12,15-23,32 and 33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-12,15-23,32 and 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The following is a final office action in response to the amendments filed 7/7/09. Amendments received on 7/7/09 have been entered. Claims 6, 13, 14 and 24-31 were previously cancelled. Accordingly claims 1-5, 7-12, 15-23, 32 and 33 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-5, 7, 8, 11, 12, 15-19, 22, 23, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai (6,377,173) in view of Liotine et al. (4,529,980) and further in view of Dykema (4,442,340).

As of claims 1-5, 7, 8, 11, 12, 15-19, 22, 23 and 33, Desai discloses a trainable transceiver system (see fig. 1) for providing an activation signal characteristic to a portable transmitter (via a key fob combination 37), the portable transmitter configured to store the activation signal characteristic and to completer a transmission based on the stored activation signal characteristic (via key/fob 37 receiving a wireless signal from the control 22 and storing the code of the garage door and later transmitting the code to

activate the garage door; see col. 2, lines 44-64; also see fig. 1), the trainable transceiver system comprising:

a transceiver configured to receive a characteristic of an activation signal from an original transmitter for actuating a remote device (via the control 22 fixed to a vehicle receiving the wireless signal from a control 30a (original transmitter; see fig. 1) of a garage door and learning the frequency and code from the received signal; see fig. 1; also see col. 2, lines 24-35). Desai further discloses that the control circuit 22 store the characteristic of the activation signal in a memory (via control circuit 22 storing the received frequency and code; see col. 2, lines 33-35). Desai further discloses that the control 22 retransmits the learned code to the key/fob 37 9see fig. 1; also see col. 2, lines 45-46; also see col. 3, lines 35-44). Desai discloses that the code communicated between the vehicle control 22 and key/fob 37 is encrypted (see col. 3, lines, 20-23). (Note: control 22 receive and transmit signal, hence comprising a transceiver).

Even though Desai disclose that the codes are learned by the vehicle controller and then transmitted to a key/fob (portable transmitter) using a RF it fails to explicitly disclose that the control circuit causes a LED to transmit the stored characteristic of the activation signal.

Liotine discloses a transmitter and receiver for controlling garage door openers and other devices (see col. 1, lines 17-20). Liotine further discloses that the receiver 30 (trainable transceiver; see fig. 3) comprises a control circuit (via microcomputer 33) and an infrared transmitter (via LED signal transmitter 36). Liotine further discloses that the receiver 30 transmits a new code to the transmitter 9 using the light emitting diode 36

(see col. 1, lines 45-55; also see col. 3, lines 44-48). Liotine further discloses that the transmitter 9 comprises an optical receiver (via infra red receiver 21; see fig. 1; also see col. 8, lines 4-9).

From the teaching of Liotine it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the trainable transceiver system of Desai to include an optical receiver in the portable transmitter and a LED to transmit the signal in the control circuit of the vehicle transmitter for the process of optical transmission as taught by Liotine in order to eliminate interference between closely spaced transmitters and receivers since the transmitter and receiver will be in close range to each other when using infra red transmission and reception (see col. 2, lines 15-16).

Even though the Examiner believes that it would have been obvious to one having ordinary skill in the art that when the light emitting diode 36 of Liotine will transmit a signal to the transmitter 9 it will light up giving visual indication to the user that the LED transmitter 36 is transmitting a signal (because it is well known that LEDs are used to give visual application to the human eye), and since the LED transmitter 36 is being used during the programming process (training process), the microcomputer 33 is lighting the LED during the training process.

In order to further support the Examiner assertion, Dykema discloses a trainable transceiver system (see fig. 3), wherein a trainable transmitter comprises a control circuit (via microcomputer 101; see fig. 2) and an LED 48, wherein the LED 48

illuminated (visual indication) when the transmitter 55 is in the learning mode (training process; see fig. 2; also see col. 3, lines 29-35)

From the teaching of Dykema it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the LED to visually communicate information to a user of the system in order to confirm to the user that a certain action has been completed.

As of claim 33, Desai discloses that control 22 further comprises operator input device (via key pad 25) where user enters the code to send a signal to the garage door (see col. 2, lines 35-41).

Liotine further discloses that a program mode switch 41 (input device) is operated in order for the receiver to transmit the new code through the LED transmitter 36 (see col. 1, line s40-55).

4. Claims 9, 10, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai (6,377,173) in view of Liotine et al. (4,529,980) and in view of Dykema (4,442,340) and further in view of Van Lente et al. (5,475,366).

5. As of claims 9, 10, 20 and 21, the combination of Desai, Liotine and Dykema discloses all the limitations of the claimed invention but fails to explicitly disclose that the trainable transceiver is configured to receive remote keyless entry data.

Van Lente discloses a trainable transceiver (via transceiver 500; see fig. 16), which learns the data from a remote transmitter for garage door and also learns the data from a remote keyless transmitter (see fig. 16).

From the teaching of Van Lente it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Desai to include the step of teaching the controller with the keyless entry data in addition to the garage door remote control data as taught by Van Lente in order to increase the functionality of the trainable transceiver so a user can use a single controller to control garage and keyless entry.

6. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desai (6,377,173) in view of Liotine et al. (4,529,980) and in view of Dykema (4,442,340) and further in view of Pinnow (4,931,789).

As of claim 32, the combination of Desai, Liotine and Dykema discloses all the limitation of claimed invention as mentioned in claim 1 above, but fails to explicitly disclose that the transmitter transmit the activation signal using both RF and optical signal.

Pinnow discloses a transmitter (via signal transmitting unit 10; see fig. 1) which transmit a signal using both infrared and radio frequency (see fig. 1a; also see col. 9, lines 65-67).

From the teaching of Pinnow it would have been obvious to one having ordinary skill in the art at the time the invention was made to transmit a signal using both optical and radio frequency as taught by Pinnow in order to obtain additional security by using two electromagnetic carriers fro the encoded signal operating in different portions of the electromagnetic spectrum (see col. 10, lines 1-3).

Response to Arguments

7. Applicant's arguments filed 7/7/09 have been fully considered but they are not persuasive.

Applicant argues that the combination of Desai, Liotine and Dykema does not disclose the limitations of claims, 1, 12 and 23. The Examiner respectfully disagrees.

As disclosed in the rejection above, the reference of Desai discloses a trainable transceiver system (see fig. 1) for providing an activation signal characteristic to a portable transmitter (via a key fob combination 37), the portable transmitter configured to store the activation signal characteristic and to completer a transmission based on the stored activation signal characteristic (via key/fob 37 receiving a wireless signal from the control 22 and storing the code of the garage door and later transmitting the code to activate the garage door; see col. 2, lines 44-64; also see fig. 1), the trainable transceiver system comprising:

a transceiver configured to receive a characteristic of an activation signal from an original transmitter for actuating a remote device (via the control 22 fixed to a vehicle receiving the wireless signal from a control 30a (original transmitter; see fig. 1) of a garage door and learning the frequency and code from the received signal; see fig. 1; also see col. 2, lines 24-35). Desai further discloses that the control circuit 22 store the characteristic of the activation signal in a memory (via control circuit 22 storing the received frequency and code; see col. 2, lines 33-35). Desai further discloses that the control 22 retransmits the learned code to the key/fob 37 9see fig. 1; also see col. 2, lines 45-46; also see col. 3, lines 35-44). Desai discloses that the code communicated

between the vehicle control 22 and key/fob 37 is encrypted (see col. 3, lines, 20-23). (Note: control 22 receive and transmit signal, hence comprising a transceiver).

Even though the reference of Desai discloses that the transmission between the control 22 and the key fob 37 is using the RF, the reference of Desai does not explicitly disclose the limitations, regarding trainable transmitter transmitting the information via an optical transmission, and lighting the LED during the training process. The Examiner would like to point out, that transmitting the information using an optical transmission does not constitute a novel feature, even the specification of the application teaches that the transmission can be optical or RF (see abstract). The Examiner is using the reference of Liotine to support that a transmitter can transmit using a light emitting diode. Liotine discloses that the receiver 30 (trainable transceiver) transmits a new code to the transmitter 9 using the light emitting diode 36 (see col. 1, lines 45-55; also see col. 3, lines 44-48).

As disclosed in the rejection above, when the light emitting diode 36 of Liotine will transmit a signal to the transmitter 9 it will light up giving visual indication to the user that the LED transmitter 36 is transmitting a signal (because it is well known that LEDs are used to give visual application to the human eye), and since the LED transmitter 36 is being used during the programming process (training process), the microcomputer 33 is lighting the LED during the training process.

The Examiner is using the reference of Dykema to teach that it is well known in the art to light a LED during a training process. Dykema discloses a trainable transceiver system (see fig. 3), wherein a trainable transmitter comprises a control

circuit (via microcomputer 101; see fig. 2) and an LED 48, wherein the LED 48 illuminated (visual indication) when the transmitter 55 is in the learning mode (training process; see fig. 2; also see col. 3, lines 29-35).

Further all three references relates to same art of garage door openers, and teach the process of training a transmitter, and it would have been obvious to one having ordinary skill in the art to combine the teaching of Desai, Liotine and Dykema to make a trainable transceiver system as disclosed in the claims of the present application.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /NABIL H. SYED/ whose telephone number is (571)270-3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on (571)272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NABIL H SYED/
Examiner
Art Unit 2612

N.S

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612